CLAIMS

1. An endoscope with a disposable cartridge for invagination of an endoscopic tube and biopsy in flexuous channels, incorporating: - a source of light; - sources of pressure and vacuum; - biopsy forceps; - an endoscopic tube with a control block and a communication branch containing inwardly light and image transmission elements, a liquid or gas feeding channel, a biopsy channel, two pairs of closely wound springs with traction lines which pairwise connect the mechanism for bending the distal end to manual extractors of traction lines located in the control block, but externally a spring mounted on the tube, an invaginator, a tip, a seal, an anal dilator, differs in that the invaginator is tightly set in layers in the shape of a cylinder placed with a gap to the endoscopic tube.

2. The endoscope as defined in claim 1 differs in that the invaginator in the form of a compact hollow cylinder is formed of different forms short layers of a thin-walled eversible tube compressed in longitudinal and transverse directions arranged at different angles and has narrowings of an external and widenings of internal diameters.

3. The endoscope as defined in claim 1 or 2 differs in that it is supplied with a disposable cartridge consisting of a shell with a projection at proximal end in which are located the invaginator, a spring, a spring fixator, a spring distancer in which a distal seal of the endoscopic tube fastened at the uneverted end of the invaginator is placed, a condom of the distal part of the endoscopic tube connected to a spring stop and tip with elements for hermetic fastening to the endoscopic tube, at that the proximal seal of the endoscopic tube with an anal dilator having a channel in the wall is located at the shell, but the everted end of the invaginator is fastened at the distal end of shell.

4. The endoscope as defined in claim 3 differs in that the endoscopic tube has transverse pleats of its external cover turned inwards and the areas for air-tight fixation of condoms' ends, as well as two air-ducts with cocks, whereof the larger one communicates through its lateral opening with the cavity of the proximal seal of the endoscopic tube, but the smaller - with the condoms' cavity.

5. The endoscope as defined in ~~any preceding claim~~ differs in that the proximal end of the cartridge for invagination joins the endoscopic tube introduction mechanism made in the shape of a cylinder with two pistons which are interconnected with distancers and the elastic tube, but the cavity between them is connected to the pressure and vacuum sources, at that the cavity between the proximal seal of the endoscopic tube and the distal piston comprises the spring, which returns the pistons to their home position and is connected to vacuum and pressure sources.

6. The endoscope as defined in any preceding claim differs in that it is supplied with an extraction-intraction system of traction lines with hydro-manual drive for controlling the distal end of the endoscopic tube, including pressure and vacuum sources which are linked to elastic tubes cavities comprising liquid and springs with traction lines, at that tubes are fixed to springs with a thread but the springs are made with steps and at the distal end are joined with traction lines, connected in control block with manual extractors-intractors of traction lines, which, in their turn, are joined with elements for synchronous vacuum feeding into the cavity of the manually extracted traction line and excess pressure into the cavity of the introduced traction line.

7. The endoscope as defined in claim 6 differs in that the extractors-intractors of traction lines contain rods with pistons and cylinders positioned on them and the element connected with rods for synchronous vacuum creating in the cavity of the extracted traction line and pressure in the cavity of the introduced traction line, at that this element is made in the shape of gear or a cross-piece connected with a control lever.

8. The endoscope as defined in claims 6, 7 differs in that the distal ends of the tubes and the traction lines terminates with a cylinder and a piston accordingly or the tubes' distal ends terminates with an elastic element, for instance a sylphone, but the traction lines are connected with the sylphone's distal end.

9. The endoscope as defined in any preceding claim differs in that it is supplied with a system for introduction and extraction of biopsy forceps which includes pressure and vacuum sources connected through a cock to the cavity of the biopsy channel, the entrance to which is hermetized by a biopsy forceps seal, but their distal end has a biopsy channel piston, at that the biopsy forceps have a traction line intensifier and include a flexible hermetic tube the cavity of which is connected to a pressure and vacuum source, but the distal ends of the traction line and the tube terminates with a piston and a cylinder accordingly or the tube terminates with an elastic element, for instance, a sylphone, but the traction line is connected to its distal end.

10. The endoscope as defined in any preceding claim differs in that a control block of the endoscopic tube is made in the shape of desk and pedal units.